

FEB 12 2007

Application No.: 09/922,092

Docket No.: JCLA6561-R2

REMARKS**Present Status of the Application**

Claims 1-8 are rejected under 35 U.S.C 103(a) as being unpatentable over Christiansen et al. (U. S. Patent No. 5,983,302; hereinafter Christiansen) in view of Arramreddy et al. (U. S. Patent No. 6,697,904; hereinafter Arramreddy). Claims 1-8 remain pending in the present application, and reconsideration of those claims is respectfully requested.

Discussion of Claim Rejections under 35 USC 103

Claims 1-8 are rejected under 35 U.S.C 103(a) as being unpatentable over Christiansen in view of Arramreddy. Applicant respectfully traverses the rejections for at least the reasons set forth below.

1. As previously mentioned again, the present invention is directed to a method of bus priority arbitration driven by data used in a bus system. The bus system comprises a bus and a plurality of masters connected to the bus. Each master can output a request for a grant to use the bus. In order to have better efficiency, the present invention responds to the request of each master according to a predefined orderly rotation. Then, the response to *the requests of the master stops according to the predefined orderly rotation when a data for one of the masters is ready*. More specifically, the master, *which is ready in preparing data and wait for the grant to use the bus, is attributed a highest priority to access the bus*.

2. In re Christiansen, as noted by the Office Action, Christiansen fails to teach that the masters are considered as a group, and attributing highest priority to any master, which the data is

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ready for the grant to use the bus.

Arramreddy is then further cited in combination.

3. In re Arramreddy, as clearly disclosed at col. 4, lines 4-19, the arbitration algorithm treats the master devices in multiple levels, such as High, Medium, and Low, as follows:

In accordance with the present invention, dynamic information, such as the state of the target the master is accessing and the availability of the data the master device is requesting, is incorporated into the arbitration algorithm, thereby greatly enhancing system performance and maximizing system efficiency. Specifically, the arbiter logic in the present invention includes multiple levels of master priority.

In one embodiment, three levels of priority are provided: HIGH, MEDIUM, and LOW. As explained in further detail below, a master that has a request posted in the request queue of the target, but does not have data available in the target, has a LOW priority. Any master which does not have its request posted in the request queue of the target has a MEDIUM priority. Finally, a master that has a request posted in the request queue of the target and data is available in the target has a HIGH priority. (Emphasis added)

Apparently, Arramreddy has disclosed a self-completion arbiter logic. Each type of priority is specifically assigned without a sequence. All the mater devices are divided into three

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priority levels.

As to point 14 of the Office Action, if the combination for Arramreddy with Christiansen is made, the arbitration algorithm of Christiansen is destroyed and all the mater devices are divided into three priority levels without a specific sequential order.

It should be also noted that Christiansen basically considers the master device being connected in equal priority without particularly considering, for example, those mater devices having no data ready at LOW and Medium priorities, based on status but not on a specific sequence.

In other words, Arramreddy has changed the principle of operation of the primary reference (*Christiansen*) (MPEP 2145).

Further, Arramreddy does not specifically suggest the missing features in Christiansen to consider the maters as a group, and attributing highest priority to any master, which the data is ready for the grant to use the bus.

For at least the foregoing reasons, Applicant respectfully submits that independent claims 1 and 7 patently define over the prior art references, and should be allowed. For at least the same reasons, dependent claims 2-6 and 8 patently define over the prior art references as well.

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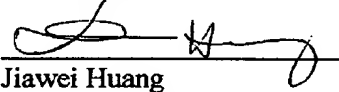
CONCLUSION

For at least the foregoing reasons, it is believed that all the pending claims 1-8 of the invention patently define over the prior art and are in proper condition for allowance. If the Examiner believes that a telephone conference would expedite the examination of the above-identified patent application, the Examiner is invited to call the undersigned.

Date: 2/12/2007

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Respectfully submitted,
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